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## DEPARTMENT OF AGRICULTURE

### Animal and Plant Health Inspection Service

#### 7 CFR Parts 305 and 319

[Docket No. APHIS-2008-0126]

RIN 0579-AC93

#### Importation of Hass Avocados From Peru

**AGENCY:** Animal and Plant Health Inspection Service, USDA.

**ACTION:** Final rule.

**SUMMARY:** We are amending the fruits and vegetables regulations to allow the importation of Hass avocados from Peru into the continental United States. As a condition of entry, Hass avocados from Peru will have to be produced in accordance with a systems approach that includes requirements for importation in commercial consignments; registration and monitoring of places of production and packinghouses; grove sanitation; pest-free areas or trapping for the South American fruit fly; pest-free areas or treatment for the Mediterranean fruit fly; surveys for the avocado seed moth; and inspection for quarantine pests by the national plant protection organization of Peru. Hass avocados from Peru will also be required to be accompanied by a phytosanitary certificate with an additional declaration stating that the avocados were grown, packed, and inspected and found to be free of pests in accordance with these requirements. This action will allow the importation of Hass avocados from Peru into the United States while continuing to provide protection against the introduction of quarantine pests.

**DATES:** *Effective Date:* February 3, 2010.

**FOR FURTHER INFORMATION CONTACT:** Ms. Charisse Cleare, Regulatory

Coordination Specialist, Regulations, Permits, and Manuals, PPQ, APHIS, 4700 River Road Unit 136, Riverdale, MD 20737-1236; (301) 734-0773.

#### SUPPLEMENTARY INFORMATION:

##### Background

The regulations in “Subpart—Fruits and Vegetables” (7 CFR 319.56–1 through 319.56–49, referred to below as the regulations) prohibit or restrict the importation of fruits and vegetables into the United States from certain parts of the world to prevent the introduction and dissemination of plant pests that are new to or not widely distributed within the United States.

On January 7, 2009, we published in the **Federal Register** (74 FR 651–664, Docket No. APHIS-2008-0126) a proposal<sup>1</sup> to amend the regulations to allow the importation of Hass avocados from Peru into the continental United States. As a condition of entry, we proposed to require Hass avocados from Peru to be produced in accordance with a systems approach that included requirements for importation in commercial consignments; registration and monitoring of places of production and packinghouses; grove sanitation; pest-free areas, trapping, or treatment for fruit flies; surveys for the avocado seed moth; and inspection for quarantine pests by the national plant protection organization (NPPO) of Peru. We also proposed to require Hass avocados from Peru to be accompanied by a phytosanitary certificate with an additional declaration stating that the avocados were grown, packed, and inspected and found to be free of pests in accordance with the proposed requirements. We proposed to add the systems approach to the regulations in a new § 319.56–49.<sup>2</sup>

We solicited comments concerning our proposal for 60 days ending March 9, 2009. We received 30 comments by that date. They were from private citizens, producers, importers, exporters, and representatives of State and foreign governments. Twenty of the commenters supported the proposed

rule. The issues raised by the remaining commenters are discussed below by topic.

#### General Comments

Two commenters expressed general concerns about the proposed rule. One stated that scientists say that not enough time has passed to study the pests associated with the importation of Hass avocados from Peru and the potential threat those pests pose. This commenter stated that, without substantial inquiry into the effects of the pests, allowing the importation of avocados from Peru would be unsafe, with very serious consequences for California avocado growers. Another commenter stated that California avocado growers have experienced pest introductions due to the inadequate inspection of Hass avocados imported from Mexico, and further stated that there is no reason to expect that inspection of Hass avocados from Peru will provide any better protection.

We prepared a pest risk assessment (PRA) and risk management document (RMD) as part of our evaluation of the request from the NPPO of Peru to export Hass avocados to the United States. Based on the evidence and discussion presented in the PRA and RMD, we have concluded that the mitigations we proposed, with some changes as discussed later in this document, will be effective at preventing the quarantine pests identified in the PRA from being introduced into the United States via the importation of avocados from Peru.

The first commenter did not provide any specific citations supporting the assertion that scientists say not enough time has passed to study the pests associated with the importation of Hass avocados from Peru, nor did the commenter indicate that the evidence presented in the PRA and RMD was inadequate.

With regard to the second commenter's concern about pests being introduced via the importation of Hass avocados from Mexico, it should be noted that, in 9 years of fruit cutting and inspection of Hass avocados imported from Mexico, over 28 million fruit were examined (20.2 million in the orchards, 7.2 million in packinghouses, and 602,490 at border inspection ports) for pests. Twice, the quarantine pest *Conotrachelus perseae* was found, both times in backyard avocados that would not have been eligible to be exported to

<sup>1</sup> To view the proposed rule and the comments we received, go to <http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=APHIS-2008-0126>.

<sup>2</sup> In this final rule, the provisions of the systems approach are added as § 319.56–50. We discuss the comments in terms of provisions of proposed § 319.56–49 so that the reader can follow along with the proposal.

the United States. Both outbreaks of this pest were eradicated. All other avocados from this export program have been found to be free of quarantine pests. There is no evidence that the importation of Hass avocados from Mexico has resulted in the introduction of quarantine pests into the United States.

#### Comments on the PRA

We prepared a draft PRA titled "Importation of 'Hass' Avocado (*Persea americana*) Fruit from Peru into the Continental United States" (May 2006). The draft PRA evaluated the risks associated with the importation of Hass avocados into the continental United States (the lower 48 States and Alaska) from Peru. We published a notice<sup>3</sup> in the **Federal Register** on May 25, 2006 (71 FR 30113, Docket No. APHIS-2006-0072), in which we advised the public of the availability of the draft PRA and solicited comments on it for 60 days ending July 24, 2006. We also conducted a peer review of the draft PRA. We made changes to the May 2006 PRA in response to public comments and peer review comments and prepared a revised PRA, dated December 2008, for the January 2009 proposal. We accepted comments on the revised PRA during the comment period for the proposed rule.

One commenter provided a comment on the May 2006 PRA recommending that mirids of the genus *Dagbertus* be added to the list of quarantine pests associated with Hass avocados from Peru. We stated in the December 2008 PRA that we had not found any evidence that *Dagbertus* spp. were pests of avocados in Peru. Addressing this statement, the commenter provided an unpublished study that the commenter believed supported the addition of *Dagbertus* spp. to the list of quarantine pests of avocados in Peru. The commenter also consulted an entomologist, who stated that he had not tested whether *Dagbertus* spp. can oviposit in hard mature avocado fruit and added, with respect to the pests' ability to travel the commercial pathway, "I can't guarantee it won't happen." The commenter urged APHIS to further evaluate the quarantine pest status of *Dagbertus* spp. to determine whether risk mitigation measures are warranted.

We appreciate the opportunity to clarify our earlier statement. While *Dagbertus* spp. are pests of avocados in

Peru, they are highly unlikely to travel the pathway of commercial avocado fruit exported from Peru. According to Wysocki *et al.* (2002), pests of the family Miridae, which includes the *Dagbertus* genus, "feed and insert their eggs on opening buds, leaves, flowers and small fruit. Attacks seem to especially affect flowers and recently set fruit, causing them to drop." Fallen immature fruit would not be marketable and thus would typically not be exported for commercial sale. The other plant parts mentioned would not be allowed to be included in shipments of avocados intended for export.

The information in Wysocki *et al.* (2002) is corroborated by the fact that, since 1985, *Dagbertus* spp. have been intercepted at U.S. ports of entry only 26 times from anywhere in the world, on any commodity, including flowers and other plant parts in addition to fruit.

The paper the commenter submitted does not identify a specific species of *Dagbertus* spp. as a pest. Additionally, none of the information we have about *Dagbertus* spp. indicates that we should further analyze any specific species within the genus. In the PRA accompanying this final rule, we have added *Dagbertus* spp. to the list of plant pests potentially affecting Hass avocados in Peru, but we have indicated in that list that these species will not follow the pathway of commercial fruit. We continue to consider *Dagbertus* spp. not to be quarantine pests.

One commenter examined the references in the PRA regarding the quarantine pest *Stenoma catenifer*, the avocado seed moth, and stated that we should have considered the work of Dr. Mark Hoddle and Dr. C.L. Hohmann in assessing the risk posed by that pest. The commenter stated that the omission of the work of these authors called into question whether the risk mitigation strategy we proposed for the avocado seed moth would be effective.

The avocado seed moth was rated as a high-risk pest, meaning that the references we consulted were sufficient to establish that the pest risk rating was the highest available. The work of Dr. Hoddle indicates that the avocado seed moths can cause extensive damage to Hass avocado crops, meaning that it supports our rating of the pest risk of the avocado seed moth as high. It also describes the seasonality of this pest, which is not relevant for Peru; avocados are only produced in one season in Peru, unlike Guatemala, the site of Dr. Hoddle's research, where avocados are produced year-round.

The two papers by Dr. Hohmann that the commenter cited discuss pesticide

treatment and avocado seed moth infestation levels in avocados grown in Brazil (Hohmann *et al.*, 2000) and the placement of avocado seed moth eggs laid within the tree and in the avocados (Hohmann *et al.*, 2003). This work does not directly address the question of the appropriate pest risk rating for avocado seed moth. As appropriate, it will inform our operational workplan, which is required under the systems approach, and specifically the provisions of the workplan that deal with specific details of fruit cutting and sampling.

One commenter stated that *Ferrisia malvastrae*, a mealybug, should not have been identified in the PRA as a quarantine pest. The commenter stated that the NPPO of Peru does not have records indicating that *F. malvastrae* is present in Peru and that the reference (Ben-Dov *et al.*, 2003) that the PRA cites as evidence of the pest's presence in Peru also indicates that the pest is present in the United States.

The genus *Ferrisia* is comprised of several species which may be difficult to differentiate from one another (Gullan *et al.*, 2003). Soon after being described, *Heliococcus malvastrae*, a parthenogenic mealybug first described by McDaniel in 1962, was synonymized with *F. virgata* (McKenzie, 1967). The species was then separated, redescribed, and named *F. consobrina* (Williams and Watson, 1988), a name that was the junior synonym to *F. malvastrae* (Ben-Dov, 2005). Hence, the observation noted in Williams & Granara (1992) records the presence of what is now considered *F. malvastrae* in Peru.

The PRA notes that *F. malvastrae* is present in the United States and further indicates that this pest is on the actionable pest list maintained by the Plant Protection and Quarantine program's National Identification Service. Our regulatory practice is to treat such pests as quarantine pests. We are making no changes to the quarantine pest status of *F. malvastrae* in response to this comment.

One commenter stated that, between 2001 and 2005, the NPPO of Peru sampled a total of 12,505 Hass avocados attached to trees, finding no fruit infested with fruit flies. The commenter asserted that these data indicate that Hass avocados attached to trees are not hosts for the fruit flies identified in the PRA as quarantine pests: *Anastrepha fraterculus*, the South American fruit fly; *A. striata*, the guava fruit fly; and *Ceratitidis capitata*, the Mediterranean fruit fly or Medfly.

While these data are not inconsistent with the assertion made by the commenter, the data are not sufficient to prove that assertion. (For example,

<sup>3</sup> To view the notice, the draft PRA, and the comments we received, go to <http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=APHIS-2006-0072>.

research would need to be done to determine the host status of avocados off the tree.) APHIS has developed a protocol for surveys and sampling to demonstrate that a fruit or vegetable is not a host of a specific pest. If the NPPO of Peru wishes to establish that Hass avocados in Peru are not hosts of these fruit flies, it can follow the APHIS protocol for doing so.

However, one of these fruit flies, *A. striata*, has been demonstrated not to infest Hass avocados, in Aluja *et al.* (2004). We do not currently consider Hass avocados to be a host of this pest; in a final rule published in the **Federal Register** on June 30, 2009 (74 FR 31154–31160, Docket No. APHIS–2006–0189), and effective on July 30, 2009, we removed restrictions related to the movement of Hass avocados from areas where certain *Anastrepha* spp. fruit flies (including *A. striata*) are present. Accordingly, we have removed *A. striata* from the pest list in the PRA that accompanies this final rule. It should be noted that *A. fraterculus* is still on the pest list, meaning that avocados from Peru will still need to be grown in places of production that have a low prevalence of *A. fraterculus*, as demonstrated by trapping, or that are free of that pest, as described in further detail later in this document.

#### Monitoring and Oversight

Two commenters addressed APHIS monitoring and oversight of the systems approach generally. One asked what the level of APHIS oversight would be in Peru, what level of expertise and resources would be dedicated to the systems approach by the NPPO of Peru, and whether periodic site visits were planned to verify program compliance. The second commenter, noting the RMD's statement that "APHIS will be directly involved with SENASA [the NPPO of Peru] in monitoring and auditing implementation of the systems approach," stated that APHIS should provide on-site monitoring of all aspects of the systems approach throughout the harvest period and that a requirement for such APHIS monitoring should be included in the regulations.

The NPPO of Peru is obligated to fulfill its responsibilities under the systems approach as a signatory to the International Plant Protection Convention (IPPC). We have determined that it is not necessary for us to monitor program activities on site unless we have reason to believe that such activities may not be adequately mitigating pest risks. Thus, we do not plan to make periodic site visits. This is consistent with our practice in other import programs. We have conducted

site visits as part of developing the systems approach; we found the NPPO of Peru to have the necessary resources and capacity to implement the systems approach. In addition, APHIS inspection of Hass avocados from Peru at the port of entry will serve as a check on the effectiveness of the systems approach.

#### Grove Sanitation

Paragraph (c) of proposed § 319.56–49 contained grove sanitation requirements. We proposed to require avocado fruit that has fallen from the trees to be removed from each place of production at least once every 7 days, starting 2 months before harvest and continuing to the end of harvest.

One commenter stated that we should require grove sanitation to occur only during the harvest season, rather than beginning 2 months before harvest, and that we should require removal of fallen fruit every 15 days, rather than every 7 days. The commenter provided the following reasons:

- Hass avocados on the ground are poor hosts for fruit flies, and fruit attached to trees are not hosts for fruit flies.
- The avocado seed moth does not occur in the coast of Peru, where most avocado production in Peru is expected to occur.
- Hass avocado fruit fall to the ground because of a normal physiological characteristic of the avocado crop, not due to pest attacks.

We disagree with this commenter. Avocado fruit do, in fact, fall from trees due to pest attacks; indeed, unusual fruit drop is often a symptom of pest infestation. In addition, fallen avocado fruit are typically damaged and thus provide good host material for pests of avocados, including fruit flies; for this reason, we proposed to prohibit fallen avocado fruit from being included in field containers of fruit brought to the packinghouse to be packed for export. The occurrence of the avocado seed moth in only one area in Peru is not relevant to this provision of the systems approach, which targets all the quarantine pests.

The 7-day interval for removal of fallen fruit that we proposed is consistent with our regulations for the importation of Hass avocados from Mexico in § 319.56–30; the requirement to begin grove sanitation 2 months before harvest is consistent with other import programs that contain grove sanitation requirements (although not the Mexican program, since Hass avocados are exported from Mexico year-round). We have determined that this sanitation period and interval are

necessary to provide appropriate protection against the introduction of quarantine pests via Hass avocados imported from Peru.

#### Mitigation Measures for *A. fraterculus*

In paragraph (d) of proposed § 319.56–49, we proposed to provide two options for mitigating the risk associated with the fruit flies *A. fraterculus*, the South American fruit fly, and *A. striata*, the guava fruit fly, in avocados from Peru: Establishment of an area free of *A. fraterculus* and *A. striata*, in accordance with our pest-free area regulations in § 319.56–5, or trapping to demonstrate that places of production have a low prevalence of *A. fraterculus* and *A. striata*.

Although the January 2009 PRA identified both *A. fraterculus* and *A. striata* as potential pests of Hass avocados from Peru, Hass avocados are known to be poor hosts for *Anastrepha* spp. fruit flies in general. However, the risk that these fruit flies will infest Hass avocados increases if their population is high in areas where avocados are produced. Trapping to demonstrate an area of low pest prevalence was proposed as an appropriate mitigation for these two fruit flies.

As noted above, we have removed *A. striata* from the pest list in the PRA accompanying this final rule, meaning that these requirements apply only with regard to *A. fraterculus* in this final rule.

One commenter stated that allowing the NPPO of Peru to define areas of low pest prevalence without direct APHIS oversight would not be prudent. Perhaps, the commenter stated, the NPPO of Peru could define areas of low pest prevalence after several years of program implementation without incident, but without a proven track record, the risks would be too great to place an untried systems approach in the hands of government officials in the exporting country. The commenter recommended that the final rule include provisions for mandatory monitoring of fruit fly trapping by APHIS.

The commenter did not identify a specific risk associated with oversight of the fruit fly trapping by the NPPO of Peru. In import programs that involve fruit fly trapping, we do not typically require APHIS oversight of the trapping itself. Instead, we require in the regulations that records of the fruit fly trapping be kept and made available to APHIS. We included in the proposed rule requirements for the NPPO of Peru to keep records of fruit fly detections for each trap, update the records each time the traps are checked, and make the records available to APHIS inspectors upon request. Fruit fly trapping itself is

conducted in accordance with the International Atomic Energy Agency (IAEA) guidelines for fruit fly trapping, which are internationally recognized and well-understood. By auditing the fruit fly trapping records, we can determine whether the trapping is being conducted consistent with the IAEA guidelines. Records of finds of fruit flies in the trapping would also indicate whether the trapping procedures needed to be adjusted. As noted earlier, we have conducted site visits as part of developing the systems approach; we found the NPPO of Peru to have the necessary resources and capacity to implement the systems approach, including fruit fly trapping. We are making no changes to the proposed rule in response to this comment.

This commenter also asserted that the proposed rule did not provide adequate mitigations for the risk associated with *A. fraterculus* and *A. striata*, stating that we should add to the final rule provisions prohibiting the distribution of Hass avocados from Peru to areas of the United States where fruit flies could become established. The commenter stated that *A. fraterculus* is considered the most important fruit fly pest in South America, with a very wide range of hosts ranging from tropical to temperate species. *A. fraterculus* exhibits greater morphological variation than related species, and there is strong evidence that a complex of cryptic species is included in the nominal species *A. fraterculus*, of which the South American variety may be more aggressive and dangerous.

The commenter stated that provisions prohibiting the distribution of Hass avocados from Mexico to certain areas of the United States were only removed when research was completed establishing that Hass avocados were not hosts of the *Anastrepha* species present in Mexico, but that *A. fraterculus* was not included in this research, in part because of evidence that the Mexican morphotype differs significantly from the South American morphotype. The commenter stated that, until and unless field research in Peru demonstrates the non-susceptibility of Hass avocados to attack by *A. fraterculus* and *A. striata*, provisions limiting the distribution of Hass avocados from Peru should be imposed.

We agree with the commenter that *A. fraterculus* is likely composed of "sibling species," as discussed in the PRA, and we also agree that the host status of Hass avocados for *A. fraterculus* is uncertain. However, the commenter did not provide any evidence that we did not consider in the

PRA when discussing the host status of Hass avocados for *A. fraterculus*, nor did the commenter point out any evidence suggesting that some species of *A. fraterculus* exhibit a greater preference for Hass avocados than others. As stated in the PRA, a review of the current literature suggests that under most circumstances, Hass avocados do not serve as hosts for *Anastrepha* spp. The PRA ultimately concluded that, given the available evidence, *A. fraterculus* could be considered a pest of avocado in Peru. This is consistent with allowing the importation of Hass avocados from Peru that originate in an area of low pest prevalence for *A. fraterculus* and requiring that Hass avocados be inspected for *A. fraterculus* before being exported to the United States.

The research to demonstrate the non-susceptibility of Hass avocados to attack by *A. fraterculus* that the commenter recommends would be necessary if we had proposed to require no mitigations for *A. fraterculus*; instead, we proposed to require Hass avocados from Peru to come from areas that are free of *A. fraterculus* or areas that have been demonstrated by trapping to have a low prevalence of *A. fraterculus*.

As noted earlier, we have determined that *A. striata* is not a pest of Hass avocados, based on research to which the commenter alludes.

The commenter also recommended that we require the storing of "voucher specimens" of *A. fraterculus* in 95 percent alcohol, to facilitate genetic analyses conducted later in time and aimed at differentiating sibling/cryptic species, some of which may exhibit a stronger preference for avocados.

If a sibling or cryptic species of *A. fraterculus* that has a stronger preference for Hass avocados were to emerge in Peru, we would become aware of it through fruit fly trapping, fruit inspection, and general monitoring, and we would impose additional restrictions on the importation of Hass avocados from Peru as appropriate. Therefore, it is not necessary to require the specimen storage that the commenter suggests.

#### Mitigation Measures for Medfly

Paragraph (e) of proposed § 319.56–49 provided three options for mitigating the risk associated with Medfly in avocados from Peru: Establishment of an area free of Medfly, trapping to demonstrate that places of production are free of Medfly, or treatment. With regard to trapping, we proposed to require that, when traps are serviced, if any Medfly are found, 10 additional traps be deployed in a 0.5-km<sup>2</sup> area

immediately surrounding all traps where Medfly was found to determine whether a reproducing population is established. If any additional Medfly are found within 30 days of the first detection, the affected place of production would be ineligible to export avocados without treatment for Medfly until the source of the infestation is identified and the infestation is eradicated. APHIS would have to concur with the determination that the infestation has been eradicated.

One commenter expressed concern about using trapping to demonstrate place of production freedom from Medfly, noting that allowing pest-free places of production would be unprecedented unless all of the export groves in Peru are greater than 0.5 km<sup>2</sup> and are surrounded by buffer zones. The commenter stated that international standards for area freedom from Medfly should continue to be used.

We agree with the commenter's concern. Peru's places of production do not all meet the conditions noted by the commenter, thus making determining place of production freedom from Medfly operationally difficult. Therefore, this final rule does not include trapping to establish a pest-free place of production as a mitigation option for Medfly. We are providing only for the establishment of pest-free areas and treatment as mitigation options in paragraph (e). We are also making several changes elsewhere in the proposed regulatory text to remove references to pest-free places of production as a mitigation option for Medfly.

#### Surveys for the Avocado Seed Moth

In paragraph (f) of proposed § 319.56–49, we proposed to require surveys to demonstrate that registered places of production are free of the avocado seed moth. Specifically, we proposed to require Peruvian departamentos<sup>4</sup> in which avocados are grown for export to the United States to be surveyed by the NPPO of Peru at least once annually, no more than 2 months before harvest begins, and found to be free from infestation by the avocado seed moth. We stated that an annual survey is appropriate for the avocado seed moth because the pest has limited mobility; the results of a survey conducted no more than 2 months before harvest would indicate freedom from the

<sup>4</sup> In Peru, the departamento is the first level of political subdivision within the country, similar to the U.S. State. However, because Peru is about five-sixths the size of Alaska and there are 25 departamentos, a typical departamento is smaller than most States.

avocado seed moth for the entire harvest period.

Two commenters addressed the fact that we proposed to require an annual rather than a semiannual survey for the avocado seed moth, noting that the regulations for the importation of Hass avocados from Mexico in § 319.56–30 require semiannual surveys for the avocado seed moth (and other seed pests), once during the wet season and once during the dry season. One commenter noted that, while the moth does have limited mobility, other factors may have greater bearing on the timing of surveys. The commenter cited field work by Dr. Mark Hoddle in Guatemala in which it was observed that seasonal transitions from humid to dry climatic conditions are accompanied by an increase in the detection of the avocado seed moth in avocado fruit. This commenter recommended that we require semiannual surveys for the avocado seed moth to provide a more accurate picture of the risk posed by that pest.

We have determined that semiannual surveys for the avocado seed moth are not necessary because the climatic shifts from wet to dry seasons that occur in Guatemala and Mexico do not occur in Peru's avocado production areas; rather, Peru's avocado production areas remain arid throughout the year. Additionally, Peru's avocado production areas are separated by desert, further inhibiting the spread of the moth between places of production. These factors indicate that an annual survey is adequate to detect the avocado seed moth.

As part of the departamento surveys, we proposed to require the NPPO of Peru to cut and inspect a biometric sample of fruit at a rate determined by APHIS. We stated that we expect the biometric sample to include about 300 fruit from each place of production.

One commenter recommended that we include more specificity in the regulations with regard to fruit cutting, stating that the NPPO of Peru should not be in a position to negotiate with APHIS on a fruit cutting sampling plan given the importance of the avocado seed moth as a pest. The commenter stated that the fact that no specific sample size would be included in the regulations provides little assurance that the survey will protect against the introduction of the avocado seed moth.

As stated in the proposal, the rate at which the fruit will be sampled will be determined by APHIS; it will not be subject to negotiation, other than the sharing of data that informs all determinations of appropriate biometric sample rates. The sample rate will detect a pest prevalence with a

confidence level that is consistent with other import programs in which surveys and inspection are used to detect high-risk pests. APHIS can adjust the rate if necessary to provide further security against pest risks. The number of fruit to be sampled will be determined based on this biometric sample rate and will be contained in the workplan developed by the NPPO of Peru and approved by APHIS; the workplan is required under the systems approach. Given this, it is not necessary to include a specific number of fruit to be sampled in the regulations.

If one or more avocado seed moths was detected in the annual survey, we proposed to require the affected place of production to be immediately suspended from the export program until appropriate measures to reestablish pest freedom, agreed upon by the NPPO of Peru and APHIS, have been taken. These measures could include further delimiting surveys, appropriate pesticide treatments, or removal of infested host material.

One commenter noted that we proposed to require surveys for the avocado seed moth to be conducted at the departamento level, but to suspend places of production when an avocado seed moth is found. This commenter stated that we should require suspension of the affected departamento for at least the remainder of the export season during which the avocado seed moth is detected, similar to the requirements in the regulations for the importation of Hass avocados from Mexico in § 319.56–30. The commenter also recommended that we amend the regulations to indicate that finding the avocado seed moth during any monitoring or inspection activity, not just the annual survey, would result in the suspension of the affected departamento.

Another commenter praised the approach in the proposed rule of suspending only the affected place of production, rather than the entire departamento, upon detection of the avocado seed moth. This commenter recommended that we change the regulations for the importation of Hass avocados from Mexico to match the approach described in the proposed rule.

The NPPO of Peru conducts its surveys for avocado seed moth at the departamento level; we proposed to recognize this survey methodology by requiring the survey to be at the departamento level. As noted earlier, the limited mobility of the pest, combined with the continual arid climate of Peru's avocado production areas and their separation by desert,

mean that the avocado seed moth will not move very far under its own power and is unlikely to move between places of production. In addition, if the pest is present in places of production close to a place of production in which the avocado seed moth has been found, the surveys would find it in those nearby places of production, and we would suspend those places of production as well. Given this information, it is appropriate to suspend from the export program only the places of production in which the avocado seed moth has been found, rather than the entire departamento.

We agree with the first commenter that any detection of an avocado seed moth, including detections during monitoring and inspection other than the annual survey, should result in suspension of the affected place of production. We have amended the regulatory text in this final rule to include detections during any monitoring or inspection activity as a reason for suspension.

We have evaluated the similar provisions of the regulations for the importation of Hass avocados from Mexico and have determined that it is not necessary to suspend the entire municipality in which an avocado seed pest has been found. We are preparing a proposed rule that would amend those regulations accordingly.

One commenter recommended two additional mitigations for the risk posed by the avocado seed moth. One, which the commenter presented as an additional, precautionary step until the incidence of avocado seed moth in the production areas of Peru is better understood, was to hold a random sample of fruit (perhaps 300 per departamento) under controlled conditions to test for emergence of adult moths. Although this would not prevent potentially infested fruit picked at the same time from entering the commercial pathway, the commenter stated that the observance of adult moths could still be used to suspend shipments once an infestation became evident, thereby reducing overall risk.

The other mitigation the commenter suggested was to prohibit the importation or distribution of Hass avocados from Peru to the State of California, to offset what the commenter characterized as the poor reliability of fruit cutting to detect larval infestations of the avocado seed moth.

The NPPO of Peru has been conducting surveys for the avocado seed moth for years, and we have visited Peru's avocado production areas to better understand the pest conditions there. We therefore disagree with the

commenter's suggestion that the incidence of avocado seed moth in the growing areas of Peru is not well understood. We also disagree with the commenter's assertion that fruit cutting is an unreliable means of detecting larval infestations of avocado seed moth. Surveying and cutting techniques can be designed to reduce uncertainties, and our selection of a biometric sampling rate will take any remaining uncertainties into account. Fruit cutting has been successful at preventing the introduction of avocado seed pests from Mexico into the United States through the importation of Hass avocados. Therefore, we have determined that the additional mitigations suggested by the commenter are not necessary to prevent the introduction of avocado seed moth into the United States via the importation of Hass avocados from Peru.

#### *Sealing Containers*

Paragraph (h) of proposed § 319.56–49 contained packinghouse requirements. To safeguard consignments of avocados to be exported from Peru to the United States, proposed paragraph (h)(4) would have required the fruit to be packed in insect-proof packaging, or covered with insect-proof mesh or a plastic tarpaulin, for transport to the United States. These safeguards would have had to remain intact until arrival in the United States.

Two commenters noted that the proposed rule did not include a requirement to seal containers while in transit to the United States. One of these commenters encouraged us to require the use of cargo seals to enhance the phytosanitary integrity of consignments during transit, to provide evidence of any container breaches, and to prevent cross-contamination from boxes of uncertified avocados or other potentially infested fruit. The other commenter also noted that the proposed rule did not include repackaging requirements for containers of Hass avocados from Peru.

We agree with the commenters that seals are useful to ensure the phytosanitary integrity of consignments. We typically require the use of such seals in the bilateral workplan that provides specific details on how the export program will be implemented in the exporting country. We will do so for avocados from Peru. Similarly, we will include repackaging requirements in the bilateral workplan.

#### *Identification of Shipments*

Proposed paragraph (h)(5) provided that shipping documents accompanying consignments of avocados from Peru that are exported to the United States would have to include the official

registration number of the place of production at which the avocados were grown and would have to identify the packing shed or sheds in which the fruit was processed and packed, and that this identification would have to be maintained until the fruit is released for entry into the United States.

Two commenters recommended that we additionally require individual cartons of avocados to be labeled with this information. (One of these commenters also recommended that we require individual avocado fruit to be so labeled as well.) The commenters stated that this information would allow for traceback to and suspension of individual places of production and packinghouses in the event that a pest is discovered in the United States, rather than having to suspend all avocado exports from Peru. The commenters stated that this requirement would thereby isolate the problem without unnecessarily disrupting the flow of trade.

We agree with these commenters that labeling cartons and fruit with place of production and packinghouse registration numbers would allow for traceback to specific places of production or packinghouses and would thus help to continue the flow of trade if a pest is discovered. We typically require in the bilateral workplan that such information be included on individual cartons. We will do so for avocados from Peru. As the commenters noted, an exporting country has an incentive to provide this information in order to minimize unnecessary trade disruptions in the event of a pest detection.

#### *Inspection*

Paragraph (i) of proposed § 319.56–49 provided for inspection of a biometric sample of fruit from each place of production by the NPPO of Peru at a rate to be determined by APHIS.

One commenter stated that the regulations should limit the amount of discretion granted to the NPPO of Peru in this most critical aspect of the systems approach, providing a specific sampling plan. Another commenter stated that the regulations for the importation of Hass avocados from Mexico require specific numbers of fruit to be cut for inspection prior to export and at the port of first arrival in the United States; this commenter praised the approach in the proposal and asked that the specific fruit cutting requirements be removed from the Mexican Hass avocado regulations.

As we proposed, the sampling rate for this inspection will be determined by APHIS. The general sampling plan will

be contained in the bilateral workplan, which APHIS must approve in order for Peru to be able to export avocados. Therefore, the NPPO of Peru will not have sole discretion in setting a biometric sample rate or developing a sampling plan. The regulations provide mechanisms by which APHIS will direct this activity.

In fact, with respect to the Mexican Hass avocado import program, the requirement to cut specific numbers of fruit for inspection prior to export and at the port of first arrival is contained in the bilateral workplan required to be developed under paragraph (c) of § 319.56–30. Paragraph (c)(3)(iv) of § 319.56–30, which contains the pre-export inspection requirement for Hass avocados from Mexico, refers to a biometric sample, at a rate determined by APHIS. Paragraph (h) of that section, which contains the requirement for inspection at the port of first arrival, does not refer to any specific sampling mechanism. We will use the workplan in a similar manner in the import program for Hass avocados from Peru.

In addition, it should be noted that Hass avocados from Peru will be inspected at the port of entry into the United States, providing a check on the efficacy of the inspection in Peru.

One commenter noted that systems approaches, such as the one we proposed for the importation of Hass avocados from Peru, are more complex in nature than post-harvest treatments and require a higher level of expertise and oversight. This commenter asked whether there would be a higher level of inspection than normal of avocados from Peru at ports of entry to verify that the avocados are free of pests.

We do not plan to inspect at a higher level than our usual level, unless evidence indicates that there may be a problem with the implementation of the systems approach. As noted earlier, we have found the NPPO of Peru to have the necessary resources and capacity to implement the systems approach.

#### *Inconsistencies With the Regulations for Importing Hass Avocados From Mexico in § 319.56–30*

Four commenters noted that the provisions of the proposed rule and the regulations for importing Hass avocados from Mexico in § 319.56–30 were inconsistent in various ways. Some of these comments have been addressed earlier in this document. The remaining comments are addressed here.

One commenter stated that it was only over a period of years that APHIS relinquished oversight of Hass avocado growers in Mexico to the Mexican NPPO, and recommended that APHIS

take a similar path with the NPPO of Peru. In contrast, two commenters stated generally that the phytosanitary track record of the Mexican Hass avocado import program over the past 11 years warrants at least no more burdensome treatment than APHIS proposed to provide for Hass avocados imported from Peru. One commenter recommended that several specific provisions of the regulations for the importation of Hass avocados from Mexico be changed to be consistent with similar provisions in the proposed rule.

Since the establishment of the Mexican Hass avocado import program, APHIS has accumulated experience with how large-scale systems approach programs such as the Mexican program work, which in turn has given us better information on the appropriate level of oversight for such programs. As stated earlier, we have found the NPPO of Peru to have the necessary resources and capacity to implement the systems approach, and, as a signatory to the IPPC, the NPPO of Peru is obligated to fulfill its responsibilities under the systems approach.

The specific differences between the proposed rule and the Mexican Hass avocado regulations brought up by the last commenter are addressed below.

The commenter stated that, because area freedom is not required, APHIS seems inclined to accept that the Hass avocado is a poor host for *A. fraterculus* and Medfly without any supporting documentation. The commenter stated that APHIS should remove fruit fly-related restrictions for Mexican Hass avocados before allowing the same commodity into the United States from another country under fewer restrictions.

Our analysis establishing that Hass avocado is a poor host for *A. fraterculus* is documented in the PRA; the commenter did not provide any comments specific to that analysis. With regard to fruit flies, as noted earlier, we published a June 2009 final rule removing restrictions related to the movement of Hass avocados from areas where certain *Anastrepha* spp. fruit flies (including *A. striata*) are present, including Mexico. The PRA did not determine that Hass avocados are a poor host for Medfly; as discussed earlier, this final rule requires Hass avocados from Peru to be produced in an area that the Administrator has determined to be free of Medfly or to be treated for Medfly.

The commenter noted that we proposed to allow the whole country of Peru to export avocados to the United States, but exports from Mexico are

limited to approved municipalities in only one State, Michoacan.

Other States in Mexico have different pests and different pest densities than Michoacan, which is less warm and humid than surrounding avocado production areas in Mexico. Mitigating the pest risk associated with Hass avocados produced in States other than Michoacan would require the development of a different systems approach. We have not received a formal request from the Government of Mexico to do so.

The commenter noted that we did not propose to require personnel conducting trapping and pest surveys to be hired by the NPPO of Peru. Instead, we proposed to require any personnel conducting trapping and pest surveys to be trained and supervised by the NPPO of Peru.

The commenter requested that we remove the requirement that the Mexican NPPO hire its personnel conducting trapping and pest surveys, which is contained in § 319.56–30(c).

We have evaluated this provision of the regulations for the importation of Hass avocados from Mexico and have determined that it is not necessary for such personnel to be hired by the Mexican NPPO. We are preparing a proposed rule that would amend those regulations accordingly.

The Mexican Hass avocado import regulations require APHIS to be directly involved with the Mexican NPPO in the monitoring and supervision of its activities. We did not propose to require direct monitoring and supervision for Hass avocados from Peru. The commenter stated that the strong record of success of the Mexican Hass avocado import program provides ample reason to remove the requirement for direct monitoring and supervision from that program.

We acknowledge the success of the Mexican Hass avocado import program, as noted earlier in this document. We plan to reevaluate this provision of the regulations and, if warranted, issue a proposal to change it.

The commenter noted that there is no specific requirement for inspection of Hass avocados imported from Peru.

Under the general fruits and vegetables regulations in § 319.56–3, APHIS is authorized to inspect all fruits and vegetables imported into the United States. It is thus not necessary to include specific provisions for port-of-entry inspection for Hass avocados from Peru.

#### *Economic Issues and Comments on the Economic Analysis*

Four commenters opposed the proposed rule for economic reasons,

stating that domestic avocado farm profit margins are already low due to adverse weather and other foreign competition. They cited specific concerns. One commenter stated that the vast majority of California avocado growers operate small family farms, with 5- to 20-acre groves, and would be adversely affected by the proposal. One commenter stated that imports should be limited to things or specialties that cannot be produced in the United States, as buying close to home helps to improve the U.S. economy and reduces carbon emissions associated with global climate change while providing better-tasting fruit to the consumer.

Another commenter mentioned that the recent economic downturn had affected domestic avocado farmers' personal wealth and access to credit. This commenter also noted that Peru's avocado growing season is from May to September, meaning that the effects on the domestic market would be seasonal, and stated that the proposal should not be finalized in order to promote sustainable, long-term, non-seasonal employment. Finally, this commenter stated that the American Recovery and Reinvestment Act of 2009 exhibits protectionism of U.S. products and employment as a policy to aid the U.S. economy, and stated that the proposed rule should reflect this policy.

The Plant Protection Act (7 U.S.C. 7701 *et seq.*), the authorizing statute for APHIS' plant-health-related activities, authorizes the Secretary of Agriculture to prohibit or restrict the importation of any plant product if the Secretary determines that the prohibition or restriction is necessary to prevent the introduction of a plant pest or noxious weed into the United States. We have determined that the measures in the systems approach we proposed, amended as described earlier, are sufficient to prevent the introduction of any plant pests. The factors cited by the commenters are not within our decisionmaking authority under the Act.

The initial regulatory flexibility analysis (IRFA) we prepared for the proposed rule acknowledged that the majority of U.S. producers and packers of fresh avocados are considered to be small entities as defined by Small Business Association size standards. However, we have estimated that U.S. consumption (demand) is more than double U.S. production of avocados, indicating that consuming only U.S. avocados would create a shortage of avocados on the U.S. market. Projected imports of avocados from Peru would likely decrease the U.S. avocado price by a maximum of 4 percent, assuming no displacement of other imports.



Furthermore, we have concluded that it is likely that at least a portion of the projected imports from Peru would displace imports from other foreign sources when fresh avocado supplies are low and demand is high, meaning that price effects would likely be smaller than 4 percent.

The Office of Management and Budget designated the proposed rule as not significant under Executive Order 12866. One commenter stated that this rule should not have been designated not significant, saying that the rule runs counter to the interests of U.S. avocado growers and does little to assure the health and safety of U.S. consumers.

Executive Order 12866 provides specific criteria for the Office of Management and Budget to use in determining the appropriate designation of a rule. This commenter did not provide any reasons why the rule should have been designated significant under Executive Order 12866. In addition, the commenter did not specify how the proposed rule should be changed to assure the health and safety of U.S. consumers. This final rule will allow the importation of Hass avocados from Peru into the United States while continuing to provide protection against the introduction of quarantine pests.

One commenter stated that allowing the importation of Hass avocados from Peru could only adversely affect producer prices while having a negligible effect on the consumer price.

As indicated in the IRFA prepared for the proposed rule, we have determined that estimated price effects and welfare impacts are highly sensitive to displacement and import levels; however, given the conservative assumption of zero displacement, imports from Peru at an estimated 50 percent more than current projections (28,500 metric tons), and short-run supply and demand elasticities, we have concluded that the overall net changes in welfare of allowing the importation of fresh Hass avocados from Peru under the specified systems approach are likely to be positive. This indicates that any decline in producer welfare would be exceeded by a gain in consumer welfare, primarily in the form of lower prices.

One commenter stated that the demand and supply elasticities used in calculating changes in producer and consumer welfare in the IRFA accompanying the proposed rule should be modified based on more recent data that reflect the current state of the U.S. economy. This commenter noted that our elasticity projections originated from a 2003 publication that used data from 1998 and stated that demand for

avocados, a product with no substitutes that is a relative mainstay in the diet of many Americans, will be inherently inelastic, meaning that price changes have relatively less effect on the amount demanded. However, the commenter stated, a new supplier of lower-priced avocados, coupled with American consumers' heightened awareness to price changes for relatively common produce (due to the poor economic climate), will cause the demand for avocados to become much more elastic and responsive to price changes than reflected in the elasticities used in the IRFA. Accordingly, the commenter recommended that we use a greater elasticity of demand value for projecting net welfare gains and that we use these elasticities to measure the effects on suppliers.

There is no published evidence to suggest that avocados have emerged as a "mainstay" of the U.S. diet. Rather, APHIS believes that avocados remain a specialty item that has become more popular in American culture over the last two decades. Furthermore, the state of the economy is not a major determinant of the price elasticity of demand for a good or service; however, consumers in a recession are more likely to reevaluate goods and services in terms of necessity or luxury. Goods and services deemed to be necessities are typically less elastic while goods determined to be luxuries are typically more elastic. A change in the price of fresh avocados may cause a consumer to reconsider purchasing avocados in times of economic downturn. The price elasticity of demand of  $-1.2$  that we used in the IRFA is a relatively elastic price elasticity of demand that reflects that consumers are relatively sensitive to changes in prices of fresh avocados.

It should be noted that, for the analysis, we used two sets of supply elasticities to measure both short-term and long-term welfare effects on producers as a result of the projected increase in imports of fresh avocados to fully capture potential changes in the market.

One commenter noted that several commenters who supported the rule stated that U.S. consumption of avocados will increase by 15 to 20 percent in 2009 and stated that such a rise in consumption is likely an overstatement based on data not reflecting the current financial condition of U.S. consumers.

Domestic consumption of fresh avocados has nearly doubled over the last decade, with an overall average increase in 10 percent per season. Although demand has been estimated to be price-elastic and domestic

consumption has declined over one season, the overall trend indicates that market demand is likely to experience long-term growth. In any case, our analysis is not dependent on such projections.

One commenter stated that, while the IRFA accompanying the proposed rule framed displacement around how imports from Peru will displace Mexican and Chilean imports, the more appropriate question is how much of the domestic supply will be displaced. The commenter asserted that more of the domestic supply will be displaced than the imports from Mexico and Chile, meaning a negative impact on an already depressed market of domestic suppliers.

The commenter provided no data to support this assertion, and published data<sup>5</sup> support our analysis. Domestic consumption of fresh avocados declined by 10 percent during the 2007–2008 season, while fresh domestic production increased by 25 percent and U.S. exports of fresh avocados increased by 47 percent. During this same season, imports from foreign sources decreased by nearly 24 percent over the previous season, suggesting that some displacement of foreign sources occurred during this period.

#### Miscellaneous Changes

In this final rule, we are correcting an error in proposed paragraph (b), which referred incorrectly to the NPPO of Peru verifying that growers are complying with the requirements of paragraphs (c) and (f) of § 319.56–49. Paragraph (f) contains the requirements for surveys for the avocado seed moth; we had intended to refer to paragraph (g), which contains harvesting requirements, and we have corrected the error in this final rule.

In addition, the proposed requirement in paragraph (b)(4) referred to "groves," rather than places of production, which was the term used in the rest of the proposed regulations. We are changing proposed paragraph (b)(4) to refer to places of production in this final rule.

Therefore, for the reasons given in the proposed rule and in this document, we are adopting the proposed rule as a final rule, with the changes discussed in this document.

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#### Executive Order 12866 and Regulatory Flexibility Act

This final rule has been reviewed under Executive Order 12866. The rule has been determined to be not significant for the purposes of Executive Order 12866 and, therefore, has not been reviewed by the Office of Management and Budget.

In accordance with the Regulatory Flexibility Act, we have analyzed the potential economic effects of this action on small entities.

The NPPO of Peru requested market access for commercial shipments of fresh Hass avocados into the continental United States for domestic consumption. APHIS is finalizing a

proposed rule that was published on January 7, 2009, to grant this request provided Peru produces its Hass avocados in accordance with a systems approach that will include registration and monitoring of places of production and packinghouses; grove sanitation; pest-free areas or trapping for the South American fruit fly; pest-free areas or treatment for Medfly; surveys for the avocado seed moth; and inspection for quarantine pests by Peru's NPPO. Hass avocados from Peru will also be required to be accompanied by a phytosanitary certificate with an additional declaration stating that the avocados have been inspected for quarantine pests and were grown and packed in accordance with the requirements of this final rule. These mitigations will allow for the importation of Hass avocados from Peru into the United States while providing protection against the introduction of quarantine pests. Application of the mitigation measures in granting Peru's request is consistent with World Trade Organization agreements that sanitary and phytosanitary regulatory restrictions should be based on scientific evidence and applied only to the extent necessary to protect human, animal, and plant health.

The Regulatory Flexibility Act of 1980 requires agencies to evaluate the potential effects of proposed and final rules on small businesses, small organizations, and small governmental jurisdictions. Section 605 of the Act allows an agency to certify a rule if the proposed rulemaking will not have a significant economic impact on a substantial number of small entities. APHIS has determined this to be the case for this final rulemaking, and this analysis provides the factual basis for such certification in this case.

The United States is the world's leading importer of all fresh Hass avocados, with imports between 60 and 75 percent of total world exports annually. Japan and Canada rank a distant second and third with combined imports of 18 to 20 percent annually. Mexico and Chile account for approximately 50 and 30 percent, respectively, of U.S. imports of Hass avocados.<sup>6</sup> The United States exports less than 1.5 percent of its production, whereas U.S. consumption is more than double production. While the final rule is consistent with World Trade Organization agreements that sanitary and phytosanitary regulatory restrictions should be based on scientific evidence and applied only to the extent necessary to protect human,

animal, and plant health, it will have the added benefit in meeting an average annual increase in domestic market demand for Hass avocados.

APHIS received several comments based on the findings of the initial regulatory flexibility analysis (IRFA) prepared for the proposed rule; however, after careful consideration none was found to contain significant issues that would require a reevaluation of the proposed regulations. We address these comments in detail in the Background section of this document.

#### Impact on Small Entities

The final rule may directly affect U.S. domestic producers of Hass avocados, as well as firms responsible for packing and shipping these commodities for domestic and foreign markets. We find that a substantial number of these businesses are small entities, according to Small Business Administration (SBA) guidelines and based on 2002 Census of Agriculture data. SBA classifies producers within the category Other Non-Citrus Fruit Farming (NAICS 111339) having annual sales of not more than \$750,000 as small entities. California is the largest U.S. producer of avocados, accounting for approximately 86 percent of all production and nearly all Hass avocado production. According to the 2002 Census of Agriculture Summary and State Data report, there were a total of 6,251 avocado farms in the United States in 2002, with California farms representing approximately 85 percent (or 4,801 farms) of this total.<sup>7</sup> Of the remaining farms, 839 are located in Florida, 601 are located in Hawaii, and 10 are located in Texas.

APHIS does not have information on the size distribution of the total U.S. avocado producers, but according to the 2002 Census of Agriculture, there were a total of 95,680 Fruit and Tree Nut farms (NAICS 1113) in the United States in 2002.<sup>8</sup> Of this number, nearly 99 percent had annual sales in 2002 of less than \$500,000, which is well below the SBA's small-entity threshold of \$750,000.<sup>9</sup> While cash receipts by size for avocado farms were not reported in the 2002 Census of Agriculture, it is reasonable to assume that most of the 6,251 domestic avocado farms currently in operation qualify as small entities.

<sup>7</sup> National Agricultural Statistics Service (NASS), United States Department of Agriculture (USDA), "United States: Summary and State Data, Volume 1," 2002 Census of Agriculture, issued June 2004.

<sup>8</sup> This number includes farms producing fruit and tree nut varieties and those specifically producing avocados.

<sup>9</sup> Source: SBA and 2002 Census of Agriculture.

<sup>6</sup> Global Trade Atlas data.

Avocado packing and shipping establishments, those engaged in postharvest crop activities (NAICS 115114), are also expected to be small according to SBA guidelines. The small-entity standard for packinghouses is \$6.5 million or less in annual receipts. In 2004, the California Avocado Commission reported that 51 companies were active handlers of California avocados at the end of October 2003. Of this number, 18 companies had first sales of avocados of under \$10,000; 8 companies had avocado sales of between \$10,000 and \$49,999; 5 companies had sales from \$50,000 to \$99,999; 5 companies had sales from \$100,000 to \$499,999; 2 companies had sales from \$500,000 to \$999,999; 2 companies had sales from \$1 million to \$4,999,999; 1 company had sales from \$5 million to \$9,999,999; 2 companies had sales from \$10 million to \$19,999,999; 6 companies had sales from \$20 million to \$49,999,999; and 2 companies sold over \$50 million worth of California avocados. This information indicates that 40 of the 51 firms are small entities. We conclude that the majority of the handlers that will be affected by the rule are small entities.

According to the Peru Avocado Growers Association, exporters expect to ship approximately 19,000 metric tons of fresh Hass avocados per year from Peru to the United States. The projected imports are roughly 5 percent of U.S. fresh avocado consumption and 11 percent of U.S. fresh avocado production. It is highly likely, however, that at least a portion of the projected imports from Peru will displace imports from other foreign sources when fresh avocado supplies are low and demand is high. If no displacement were to occur, projected fresh avocado imports from Peru will represent an increase in fresh avocado imports of 9 percent. The extent to which displacement occurs is a critical factor affecting the size of potential impacts of this final rule, but, even under the conservative estimate of zero displacement, overall net benefits are expected to be positive. In the analysis of expected price and welfare impacts of the IRFA, we examined effects of the projected level of fresh avocado imports from Peru if none, 11 percent, or 24 percent of the imports were to displace fresh avocado imports from other countries. We compared the price and welfare effects for two sets of demand and supply elasticities and quantified the welfare effects. The higher the level of displacement of imports from other countries, the smaller the price decline, and the smaller the welfare losses for producers

and welfare gains for consumers. In all cases, the model results showed positive net benefits overall.

In addition to considering the effects for three possible levels of displacement of fresh avocado imports from other sources, we analyzed the sensitivity of the results to different quantities of fresh Hass avocados imported from Peru. We calculated the price and welfare effects assuming the avocado imports to be 50 percent less or 50 percent greater than the 19,000 metric tons projected by Peru. Given the linearity of the model used to assess welfare impacts, this sensitivity analysis yielded changes in welfare that are proportional to the assumed levels of imports. Reasonably, some portion of the imports from Peru will likely displace existing imports, and price and welfare effects of the rule for U.S. entities will be thereby moderated. The results of the sensitivity analysis indicate that consumers may be positively affected and U.S. producers may be negatively affected by a decline in market prices ranging between 1 percent and 6 percent, depending on the price elasticities of demand and supply and displacement ranging from 11 to 24 percent of fresh avocado imports from Peru. Net welfare gains for these same levels of displacement range from \$2.9 million to \$17.8 million. In all of the modeled scenarios, consumer gains resulting from the final rule were found to exceed U.S. producer losses. Nevertheless, producer prices are estimated to continue to decline in the long run, which may continue to negatively impact producer revenues. As producer receipts decline, so shall revenues for avocado handlers. As domestic demand experiences an average annual increase for this specialty product, the modeled results for all scenarios in the long run showed positive net benefits overall.

We conclude that, while small producing entities will be affected by the final rule, the overall net changes in welfare of allowing the importation of fresh Hass avocados from Peru under the specified systems approach are likely to be positive given the sizable domestic demand for Hass avocados given the available domestic supply.

Under these circumstances, the Administrator of the Animal and Plant Health Inspection Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

#### Executive Order 12988

This final rule allows Hass avocados to be imported into the United States from Peru. State and local laws and

regulations regarding avocados imported under this rule will be preempted while the fruit is in foreign commerce. Fresh avocados are generally imported for immediate distribution and sale to the consuming public, and remain in foreign commerce until sold to the ultimate consumer. The question of when foreign commerce ceases in other cases must be addressed on a case-by-case basis. No retroactive effect will be given to this rule, and this rule will not require administrative proceedings before parties may file suit in court challenging this rule.

#### National Environmental Policy Act

An environmental assessment and finding of no significant impact have been prepared for this final rule. The environmental assessment provides a basis for the conclusion that the importation of Hass avocados from Peru under the systems approach required by this final rule will not have a significant impact on the quality of the human environment. Based on the finding of no significant impact, the Administrator of the Animal and Plant Health Inspection Service has determined that an environmental impact statement need not be prepared.

The environmental assessment and finding of no significant impact were prepared in accordance with: (1) The National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq.*), (2) regulations of the Council on Environmental Quality for implementing the procedural provisions of NEPA (40 CFR parts 1500–1508), (3) USDA regulations implementing NEPA (7 CFR part 1b), and (4) APHIS' NEPA Implementing Procedures (7 CFR part 372).

The environmental assessment and finding of no significant impact may be viewed on the Regulations.gov Web site.<sup>10</sup> Copies of the environmental assessment and finding of no significant impact are also available for public inspection at USDA, Room 1141, South Building, 14th Street and Independence Avenue, SW., Washington, DC, between 8 a.m. and 4:30 p.m., Monday through Friday, except holidays. Persons wishing to inspect copies are requested to call ahead on (202) 690–2817 to facilitate entry into the reading room. In addition, copies may be obtained by writing to the individual listed under

**FOR FURTHER INFORMATION CONTACT.**

<sup>10</sup> Go to <http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=APHIS-2008-0126>. The environmental assessment and finding of no significant impact will appear in the resulting list of documents.

**Paperwork Reduction Act**

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the information collection or recordkeeping requirements included in this rule have been approved by the Office of Management and Budget (OMB) under OMB control number 0579-0355.

**E-Government Act Compliance**

The Animal and Plant Health Inspection Service is committed to compliance with the E-Government Act to promote the use of the Internet and other information technologies, to provide increased opportunities for citizen access to Government information and services, and for other purposes. For information pertinent to

E-Government Act compliance related to this rule, please contact Mrs. Celeste Sickles, APHIS' Information Collection Coordinator, at (301) 851-2908.

**List of Subjects****7 CFR Part 305**

Irradiation, Phytosanitary treatment, Plant diseases and pests, Quarantine, Reporting and recordkeeping requirements.

**7 CFR Part 319**

Coffee, Cotton, Fruits, Imports, Logs, Nursery stock, Plant diseases and pests, Quarantine, Reporting and recordkeeping requirements, Rice, Vegetables.

■ Accordingly, we are amending 7 CFR parts 305 and 319 as follows:

**PART 305—PHYTOSANITARY TREATMENTS**

■ 1. The authority citation for part 305 continues to read as follows:

**Authority:** 7 U.S.C. 7701-7772 and 7781-7786; 21 U.S.C. 136 and 136a; 7 CFR 2.22, 2.80, and 371.3.

■ 2. In § 305.2, the table in paragraph (h)(2)(i) is amended by adding in alphabetical order, under Peru, a new entry for "Avocado" to read as follows:

**§ 305.2 Approved treatments.**

*	*	*	*	*
(h)	*	*	*	
(2)	*	*	*	
(i)	*	*	*	

Location	Commodity	Pest	Treatment schedule
Peru.			
	Avocado .....	<i>Ceratitis capitata</i> .....	MB T101-c-1, MB&CT T108-a-1, MB&CT T108-a-2, MB&CT T108-a-3, CT T107-a.

**PART 319—FOREIGN QUARANTINE NOTICES**

■ 3. The authority citation for part 319 continues to read as follows:

**Authority:** 7 U.S.C. 450, 7701-7772, and 7781-7786; 21 U.S.C. 136 and 136a; 7 CFR 2.22, 2.80, and 371.3.

■ 4. A new § 319.56-50 is added to read as follows:

**§ 319.56-50 Hass avocados from Peru.**

Fresh Hass variety avocados (*Persea americana* P. Mill.) may be imported into the continental United States from Peru only under the conditions described in this section. These conditions are designed to prevent the introduction of the following quarantine pests: *Anastrepha fraterculus* (Wiedemann), the South American fruit fly; *Ceratitis capitata* (Wiedemann), the Mediterranean fruit fly; *Coccus viridis* (Green), the green scale; *Ferrisia malvastrae* (McDaniel), a mealybug; and *Stenomoma catenifer* Walsingham, the avocado seed moth.

(a) *General requirements.* (1) The national plant protection organization (NPPO) of Peru must provide a workplan to APHIS that details the activities that the NPPO of Peru will, subject to APHIS' approval of the

workplan, carry out to meet the requirements of this section. The NPPO of Peru must also establish a trust fund in accordance with § 319.56-6.

(2) The avocados must be grown at places of production that are registered with the NPPO of Peru and that meet the requirements of this section.

(3) The avocados must be packed for export to the United States in packinghouses that are registered with the NPPO of Peru and that meet the requirements of this section.

(4) Avocados from Peru may be imported in commercial consignments only.

(b) *Monitoring and oversight.* (1) The NPPO of Peru must visit and inspect registered places of production monthly, starting at least 2 months before harvest and continuing until the end of the shipping season, to verify that the growers are complying with the requirements of paragraphs (c) and (g) of this section and follow pest control guidelines, when necessary, to reduce quarantine pest populations. If trapping is conducted under paragraph (d)(2) of this section, the NPPO of Peru must also verify that the growers are complying with the requirements in those paragraphs and must certify that each place of production has effective fruit fly trapping programs. Any personnel conducting trapping and pest surveys

under paragraphs (d)(2) or (f) of this section must be trained and supervised by the NPPO of Peru. APHIS may monitor the places of production if necessary.

(2) In addition to conducting fruit inspections at the packinghouses, the NPPO of Peru must monitor packinghouse operations to verify that the packinghouses are complying with the requirements of paragraph (h) of this section.

(3) If the NPPO of Peru finds that a place of production or packinghouse is not complying with the requirements of this section, no fruit from the place of production or packinghouse will be eligible for export to the United States until APHIS and the NPPO of Peru conduct an investigation and appropriate remedial actions have been implemented.

(4) The NPPO of Peru must retain all forms and documents related to export program activities in places of production and packinghouses for at least 1 year and, as requested, provide them to APHIS for review.

(c) *Grove sanitation.* Avocado fruit that has fallen from the trees must be removed from each place of production at least once every 7 days, starting 2 months before harvest and continuing to the end of harvest. Fallen avocado fruit may not be included in field containers

of fruit brought to the packinghouse to be packed for export.

(d) *Mitigation measures for A.*

*fraterculus*. Places of production must meet one of the following requirements for *A. fraterculus*:

(1) *Pest-free area*. The avocados must be produced in a place of production located in an area that is designated as free of *A. fraterculus* in accordance with § 319.56–5.

(2) *Place of production with low pest prevalence*. (i) Beginning at least 1 year before harvest begins and continuing through the end of the harvest, trapping must be conducted in registered places of production with at least 1 trap per 0.2 square kilometers (km<sup>2</sup>) to demonstrate that the places of production have a low prevalence of *A. fraterculus*. APHIS-approved traps baited with APHIS-approved plugs must be used and serviced at least once every 2 weeks.

(ii) During the trapping, when traps are serviced, if *A. fraterculus* are trapped at a particular place of production at cumulative levels above 0.7 flies per trap per day, pesticide bait treatments must be applied in the affected place of production in order for the place of production to remain eligible to export avocados to the United States. The NPPO of Peru must keep records of fruit fly detections for each trap, update the records each time the traps are checked, and make the records available to APHIS inspectors upon request.

(e) *Mitigation measures for C. capitata*. Places of production must meet one of the following requirements for *C. capitata*:

(1) *Pest-free area*. The avocados must be produced in a place of production located in an area that is designated as free of *C. capitata* in accordance with § 319.56–5.

(2) *Treatment*. Avocados from Peru must be treated for *C. capitata* in accordance with part 305 of this chapter.

(f) *Surveys for S. catenifer*.

(1) Peruvian departamentos in which avocados are grown for export to the United States must be surveyed by the NPPO of Peru at least once annually, no more than 2 months before harvest begins, and found to be free from infestation by *S. catenifer*. APHIS must approve the survey protocol used to determine and maintain pest-free status and the actions to be performed if *S. catenifer* is detected. Surveys must include representative areas from all parts of each registered place of production in each departamento. The NPPO of Peru must cut and inspect a biometric sample of fruit at a rate

determined by APHIS. Fruit sampled must be either from the upper half of the tree or from the ground. Sampled fruit must be cut and examined for the presence of eggs and larvae of *S. catenifer* in the pulp or seed and for the presence of eggs in the pedicel.

(2) If one or more *S. catenifer* is detected in the annual survey, or during any other monitoring or inspection activity, the affected place of production will be immediately suspended from the export program until appropriate measures to reestablish pest freedom, agreed upon by the NPPO of Peru and APHIS, have been taken. The NPPO of Peru must keep records of *S. catenifer* detections for each orchard, update the records each time the orchards are surveyed, and make the records available to APHIS inspectors upon request. The records must be maintained for at least 1 year after the beginning of the harvest.

(g) *Harvesting requirements*. Harvested avocados must be placed in field cartons or containers that are marked with the official registration number of the place of production. The place of production where the avocados were grown must remain identifiable when the fruit leaves the grove, at the packinghouse, and throughout the export process. The fruit must be moved to a registered packinghouse within 3 hours of harvest or must be protected from fruit fly infestation until moved. The fruit must be safeguarded by an insect-proof screen or plastic tarpaulin while in transit to the packinghouse and while awaiting packing.

(h) *Packinghouse requirements*.

(1) During the time registered packinghouses are in use for packing avocados for export to the United States, the packinghouses may only accept avocados that are from registered places of production and that are produced in accordance with the requirements of this section.

(2) Avocados must be packed within 24 hours of harvest in an insect-exclusionary packinghouse. All openings to the outside of the packinghouse must be covered by screening with openings of not more than 1.6 mm or by some other barrier that prevents pests from entering. The packinghouse must have double doors at the entrance to the facility and at the interior entrance to the area where the avocados are packed.

(3) Before packing, all avocados must be cleaned of all plant debris.

(4) Fruit must be packed in insect-proof packaging, or covered with insect-proof mesh or a plastic tarpaulin, for transport to the United States. These

safeguards must remain intact until arrival in the United States.

(5) Shipping documents accompanying consignments of avocados from Peru that are exported to the United States must include the official registration number of the place of production at which the avocados were grown and must identify the packing shed or sheds in which the fruit was processed and packed. This identification must be maintained until the fruit is released for entry into the United States.

(i) *NPPO of Peru inspection*.

Following any post-harvest processing, inspectors from the NPPO of Peru must inspect a biometric sample of fruit from each place of production at a rate to be determined by APHIS. The inspectors must visually inspect for the quarantine pests listed in the introductory text of this section and must cut fruit to inspect for *S. catenifer*. Unless the avocados were produced in a pest-free area as described in paragraph (d)(1) of this section, the inspectors must cut fruit to inspect for *A. fraterculus*. Unless the avocados were produced in a pest-free area as described in paragraph (e)(1) of this section, the inspectors must cut fruit to inspect for *C. capitata*. If any quarantine pests are detected in this inspection, the place of production where the infested avocados were grown will immediately be suspended from the export program until an investigation has been conducted by APHIS and the NPPO of Peru and appropriate mitigations have been implemented. If *C. capitata* is detected, avocados from the place of production where the infested avocados were produced may be imported into the United States only if treated with an approved treatment for *C. capitata* in accordance with part 305 of this chapter.

(j) *Phytosanitary certificate*. Each consignment of Hass avocados imported from Peru into the United States must be accompanied by a phytosanitary certificate issued by the NPPO of Peru with an additional declaration stating that the avocados in the consignment were grown, packed, and inspected and found to be free of pests in accordance with the requirements of 7 CFR 319.56–50. In addition:

(1) If the avocados were produced in an area free of *A. fraterculus*, the phytosanitary certificate must state that the avocados in this consignment were produced in an area designated as free of *A. fraterculus* in accordance with 7 CFR 319.56–5.

(2) If the avocados were produced in an area free of *C. capitata*, the phytosanitary certificate must state that the avocados in this consignment were

produced in an area designated as free of *C. capitata* in accordance with 7 CFR 319.56–5.

(3) If the avocados have been treated for *C. capitata* prior to export, the phytosanitary certificate must state that the avocados in the consignment have been treated for *C. capitata* in accordance with 7 CFR part 305.

(Approved by the Office of Management and Budget under control number 0579–0355)

Done in Washington, DC, this 28th day of December.

Cindy Smith,

Administrator, Animal and Plant Health Inspection Service.

[FR Doc. E9–31182 Filed 12–31–09; 8:45 am]

BILLING CODE 3410–34–P

## NUCLEAR REGULATORY COMMISSION

### 10 CFR Part 50

RIN 3150–AI01

[NRC–2007–0008]

### Alternate Fracture Toughness Requirements for Protection Against Pressurized Thermal Shock Events

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) is amending its regulations to provide alternate fracture toughness requirements for protection against pressurized thermal shock (PTS) events for pressurized water reactor (PWR) pressure vessels. This final rule provides alternate PTS requirements based on updated analysis methods. This action is desirable because the existing requirements are based on unnecessarily conservative probabilistic fracture mechanics analyses. This action reduces regulatory burden for those PWR licensees who expect to exceed the existing requirements before the expiration of their licenses, while maintaining adequate safety, and may choose to comply with the final rule as an alternative to complying with the existing requirements.

**DATES:** Effective Date: February 3, 2010.

**ADDRESSES:** You can access publicly available documents related to this document using the following methods:

*Federal e-Rulemaking Portal:* Go to <http://www.regulations.gov> and search for documents filed under Docket ID NRC–2007–0008. Address questions about NRC Dockets to Carol Gallagher at 301–492–3668; e-mail [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

*NRC's Public Document Room (PDR):* The public may examine publicly available documents at the NRC's PDR, Public File Area O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The PDR reproduction contractor will copy documents for a fee.

*NRC's Agencywide Documents Access and Management System (ADAMS):* Publicly available documents created or received at the NRC are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this page, the public can gain entry into ADAMS, which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's PDR reference staff at 1–800–397–4209, or (301) 415–4737, or by e-mail to [PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov).

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#### SUPPLEMENTARY INFORMATION:

- I. Background
- II. Discussion
- III. Responses to Comments on the Proposed Rule and Supplemental Proposed Rule
- IV. Section-by-Section Analysis
- V. Availability of Documents
- VI. Agreement State Compatibility
- VII. Voluntary Consensus Standards
- VIII. Finding of No Significant Environmental Impact: Availability
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- XIII. Congressional Review Act

#### I. Background

PTS events are system transients in a PWR in which there is a rapid operating temperature cooldown that results in cold vessel temperatures with or without repressurization of the vessel. The rapid cooling of the inside surface of the reactor vessel causes thermal stresses. The thermal stresses can combine with stresses caused by high pressure. The aggregate effect of these

stresses is an increase in the potential for fracture if a pre-existing flaw is present in a material susceptible to brittle failure. The ferritic, low alloy steel of the reactor vessel beltline adjacent to the core, where neutron radiation gradually embrittles the material over the lifetime of the plant, can be susceptible to brittle fracture.

The current PTS rule, described in § 50.61, “Fracture Toughness Requirements for Protection against Pressurized Thermal Shock Events,” adopted on July 23, 1985 (50 FR 29937), establishes screening criteria below which the potential for a reactor vessel to fail due to a PTS event is deemed to be acceptably low. These screening criteria effectively define a limiting level of embrittlement beyond which operation cannot continue without further plant-specific evaluation.

A licensee may not continue to use a reactor vessel with materials predicted to exceed the screening criteria in § 50.61 without implementing compensatory actions or additional plant-specific analyses unless the licensee receives an exemption from the requirements of the rule. Acceptable compensatory actions are neutron flux reduction, plant modifications to reduce the PTS event probability or severity, and reactor vessel annealing, which are addressed in §§ 50.61(b)(3), (b)(4), and (b)(7); and 50.66, “Requirements for Thermal Annealing of the Reactor Pressure Vessel.”

Currently, no operating PWR vessel is projected to exceed the § 50.61 screening criteria before the expiration of its 40 year operating license. However, several PWR vessels are approaching the screening criteria, while others are likely to exceed the screening criteria during the extended period of operation of their first license renewal.

The NRC's Office of Nuclear Regulatory Research (RES) developed a technical basis that supports updating the PTS regulations. This technical basis concluded that the risk of through-wall cracking due to a PTS event is much lower than previously estimated. This finding indicated that the screening criteria in § 50.61 are unnecessarily conservative and may impose an unnecessary burden on some licensees. Therefore, the NRC developed a proposed new rule, § 50.61a, “Alternate Fracture Requirements for Protection against Pressurized Thermal Shock Events,” providing alternate screening criteria and corresponding embrittlement correlations based on the updated technical basis. The NRC decided that providing a new section containing the updated screening